

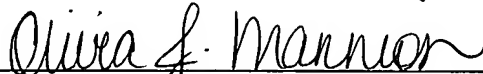
PATENT  
Attorney Docket No. ASX-015C4

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): Smith et al.  
SERIAL NO.: 10/689,165 GROUP NO.: Not yet assigned.  
FILING DATE: October 20, 2003 EXAMINER: Not yet assigned.  
TITLE: TOROIDAL LOW-FIELD REACTIVE GAS SOURCE

**CERTIFICATE OF FIRST CLASS MAILING UNDER 37 C.F.R. 1.8**

I hereby certify that this correspondence, and any document(s) referred to as enclosed herein, is/are being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 9th day of January, 2004.

  
Olivia J. Mannion

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Submitted herewith are: Transmittal Form (1 page); Supplemental Information Disclosure Statement (3 pages); Form PTO-1449 (3 pages); References Labeled A79 to A126, B6 and C122 to C125; and a return receipt postcard.



# TRANSMITTAL FORM

Application Serial Number	10/689,165
Filing Date	October 20, 2003
First Named Inventor	Smith
Group Art Unit	Not yet assigned.
Examiner Name	Not yet assigned.
Attorney Docket No.	ASX-015C4
Patent No.	Not applicable
Issue Date	Not applicable

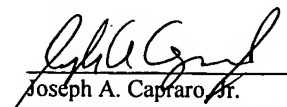
## ENCLOSURES (check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Check Attached <input type="checkbox"/> Copy of Fee Transmittal Form	<input type="checkbox"/> Copy of Notice to File Missing Parts of Application <input type="checkbox"/> Formal Drawing(s)	<input type="checkbox"/> Notice of Appeal to Board of Patent Appeals and Interferences <input type="checkbox"/> Appeal Brief (in triplicate)
<input type="checkbox"/> Amendment/Response <input type="checkbox"/> Preliminary <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Letter to Official Draftsperson including Drawings [Total Sheets _____]	<input type="checkbox"/> Request For Continued Examination (RCE) Transmittal <input type="checkbox"/> Power of Attorney (Revocation of Prior Powers) <input type="checkbox"/> Terminal Disclaimer	<input type="checkbox"/> Status Inquiry <input checked="" type="checkbox"/> Return Receipt Postcard <input checked="" type="checkbox"/> Certificate of First Class Mailing under 37 C.F.R. 1.8 <input type="checkbox"/> Certificate of Facsimile Transmission under 37 C.F.R. 1.8
<input type="checkbox"/> Petition for Extension of Time	<input type="checkbox"/> Executed Declaration and Power of Attorney for Utility or Design Patent Application	<input type="checkbox"/> Additional Enclosure(s) (please identify below)
<input checked="" type="checkbox"/> Supplemental Information Disclosure Statement <input checked="" type="checkbox"/> Form PTO-1449 <input checked="" type="checkbox"/> Copies of IDS Citations	<input type="checkbox"/> Small Entity Statement <input type="checkbox"/> CD(s) for large table or computer program	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> Amendment After Allowance	
<input type="checkbox"/> Sequence Listing submission <input type="checkbox"/> Paper Copy/CD <input type="checkbox"/> Computer Readable Copy <input type="checkbox"/> Statement verifying identity of above	<input type="checkbox"/> Request for Certificate of Correction <input type="checkbox"/> Certificate of Correction (in duplicate)	

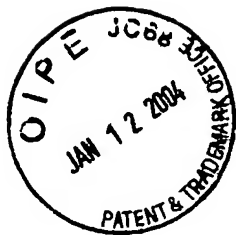
## CORRESPONDENCE ADDRESS

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Testa, Hurwitz & Thibault, LLP  
High Street Tower  
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Boston, MA 02110  
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## SIGNATURE BLOCK

Respectfully submitted,  
  
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Attorney for the Applicants  
Testa, Hurwitz & Thibault, LLP  
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Boston, MA 02110

Date: January 9, 2004  
Reg. No. 36,471  
Tel. No.: (617) 248-7369  
Fax No.: (617) 248-7100



PATENT  
Attorney Docket No. ASX-015C4

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANT(S): Smith et al.  
SERIAL NO.: 10/689,165 GROUP NO.: Not yet assigned.  
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Commissioner for Patents  
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Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with the provisions of 37 C.F.R. 1.97 and 1.98, Applicants hereby make of record the patents and publications listed on the accompanying Form PTO-1449, and other information contained herein, for consideration by the Examiner in connection with the examination of the above-identified patent application. Copies of the patents and publications are enclosed.

**REMARKS**

In accordance with the provisions of 37 C.F.R. 1.97, this statement is being filed (CHECK ONE):

- ☒ (1) within three (3) months of the **filing date** of a national application other than a continued prosecution application under 37 C.F.R. 1.53(d), or within three (3) months of the **date of entry of the national stage** as set forth in 37 C.F.R. 1.491 in an international application, or before the mailing of the **first Office action** on the merits, or before the mailing of a **first Office action** after the filing of a request for continued examination under 37 C.F.R. 1.114; or
- ☐ (2) after the period defined in (1) but before the mailing date of a **final action** or a **notice of allowance** under 37 C.F.R. 1.311, and
- ☐ the requisite Statement is below, **OR**
- ☐ the requisite fee under 37 C.F.R. 1.17(p), namely **\$180.00**, is included herein, or
- ☐ (3) after the mailing date of a **final action** or **notice of allowance** but before the payment of the **issue fee**, **AND**

- ☐ the requisite Statement is below, **AND**
- ☐ the requisite petition fee under 37 C.F.R. 1.17(p), namely **\$180.00** is included herein.

It is respectfully requested that each of the patents and publications listed on the attached Form PTO-1449, and other information contained herein, be made of record in this application.

#### STATEMENT

As required under 37 C.F.R. 1.97(e), Applicant(s), through the undersigned, hereby state either that [check the appropriate space only if either (2) or (3) is checked on the previous page and the Statement is required]:

- ☐ 1. Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application **not more than three months** prior to the filing of the Information Disclosure Statement; or
- ☐ 2. No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing this Statement after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to **any individual** designated in 37 C.F.R. 1.56(c) **more than three months** prior to the filing of the Information Disclosure Statement.

On April 3, 2003, Advanced Energy Industries, Inc. ("Advanced Energy") filed a Complaint in the United States District Court, District of Colorado (Civil Action No. 03-WM-0573 (CBS)) seeking a Declaratory Judgment that certain of its reactive gas sources do not infringe three patents owned by MKS Instruments, Inc.'s ("MKS's") subsidiary Applied Science and Technology, Inc. ("ASTeX"). The patents at issue in the Colorado lawsuit include U.S. Patent 6,150,628, U.S. Patent No. 6,338,226, and U.S. Patent No. 6,486,431. The subject application is a continuation-in-part of US Serial No. 09/774,165, which is a continuation-in-part of US Patent No. 6,486,431, which is a continuation of U.S. Patent 6,150,628. On May 14, 2003, MKS moved to dismiss or transfer the Colorado lawsuit.

On May 14, 2003, MKS and its subsidiary ASTeX filed a Complaint in United States District Court, District of Delaware (Civil Action No. 03-469-JJF) alleging that Advanced Energy was infringing five patents owned by ASTeX by making, offering for sale and selling certain reactive gas sources. The patents at issue in the Delaware lawsuit include the patents at issue in the Colorado lawsuit, U.S. Patent

6,552,296, and U.S. Patent No. 6,559,408. On July 10, 2003, Advanced Energy moved to dismiss or transfer the Delaware lawsuit. On December 24, 2003, the Colorado Court ordered the lawsuit transferred to the United States Court, District of Delaware. A Markman Hearing in the Delaware lawsuit is scheduled for January 13, 2004, and a jury trial is scheduled for late July 2004. Discovery is proceeding on a schedule set by the United States District Court, District of Delaware.

Applicants' enclose copies of the complaint and amended complaint in the (now transferred) Colorado lawsuit and copies of the complaint and answer in the Delaware lawsuit. In its amended complaint in the Colorado lawsuit and its answer in the Delaware lawsuit, AE alleges that one or more claims of the '628, '226, '431, '296, and '408 patents are invalid. See, e.g. pg. 9 of the amended complaint in the Colorado lawsuit (C125) and pg. 5 of the answer in the Delaware lawsuit (C124). As the Defendant in the Delaware lawsuit, Advanced Energy, has brought the patents and publications listed on the attached Form PTO-1449 to Applicants' attention during the discovery process.

In its amended complaint in the Colorado lawsuit and its answer in the Delaware lawsuit, Advanced Energy alleges, among other things, that one or more of the '226, '431, '296 and '408 patents are invalid, void and/or unenforceable due to inequitable conduct with intent to deceive in the form of failing to disclose material information, making material misrepresentations of fact, or submitting false material information to the PTO during prosecution of the applications that became the '226, '431, '296 and '408 patents. See, e.g., pp. 4-8 of the amended complaint in the Colorado lawsuit (C125) and pp. 6-11 of the answer in the Delaware lawsuit (C124).

Applicants' believe that the above-described allegations are without merit and expect to be fully vindicated through the judicial process. In accordance with their duty of candor and good faith, Applicants submit the enclosed documents for consideration.


If the Examiner has questions regarding any of the above, the Examiner is invited to call the undersigned attorney at (617) 248-7369.

Respectfully submitted,

Date: January 9, 2003  
Reg. No. 36,471

Tel. No.: (617) 248-7369  
Fax No.: (617) 248-7100

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\_\_\_\_\_  
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High Street Tower  
125 High Street  
Boston, Massachusetts 02110



FORM PTO - 1449

SUPPLEMENTAL INFORMATION  
DISCLOSURE STATEMENT

ATTORNEY DOCKET NO.: ASX-015C4

APPLICANTS: Smith et al.

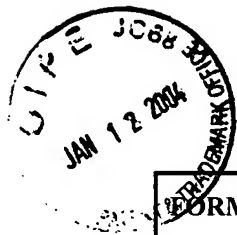
SERIAL NO.: 10/689,165

FILING DATE: October 20, 2003

GROUP: Not yet assigned.

## U.S. PATENT DOCUMENTS

EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A79	H268	05/05/87	Owen			
	A80	3,054,742	09/18/62	Thonemann et al.			
	A81	3,109,801	11/05/63	Thonemann			
	A82	3,278,384	10/11/66	Lenard et al.			
	A83	3,433,705	03/18/69	Cornish			
	A84	4,057,462	11/08/77	Jassby et al.			
	A85	4,073,680	02/14/78	Kelley			
	A86	4,110,595	08/29/78	Brambilla et al.			
	A87	4,263,096	04/21/81	Ohkawa et al.			
	A88	4,282,267	08/04/81	Küyel			
	A89	4,292,125	09/29/81	Bers			
	A90	4,368,092	01/11/83	Steinberg et al.			
	A91	4,431,898	02/14/84	Reinberg et al.			
	A92	4,601,871	07/22/86	Turner			
	A93	4,679,007	07/07/87	Reese et al.			
	A94	4,732,761	03/22/88	Machida et al.			
	A95	4,735,765	04/05/88	Harris et al.			
	A96	4,767,590	08/30/88	Stix et al.			
	A97	4,780,803	10/25/88	Dede Garcia-Santamaria			
	A98	4,794,217	12/27/88	Quan et al.			
	A99	4,861,622	08/29/89	Yamazaki et al.			
	A100	4,863,671	09/05/89	Okada			
EXAMINER					DATE CONSIDERED		



<b>FORM PTO - 1449</b>				<b>ATTORNEY DOCKET NO.: ASX-015C4</b>			
<b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT</b>				APPLICANTS: Smith et al.			
				SERIAL NO.: 10/689,165			
				FILING DATE: October 20, 2003			
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<b>U.S. PATENT DOCUMENTS</b>							
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	A101	4,877,757	10/31/89	York et al.			
	A102	4,908,492	03/13/90	Okamoto et al.			
	A103	4,918,031	04/17/90	Flamm et al.			
	A104	4,985,113	01/15/91	Fujimoto et al.			
	A105	4,996,077	02/26/91	Moslehi et al.			
	A106	5,061,838	10/29/91	Lane et al.			
	A107	5,130,003	07/14/92	Conrad			
	A108	5,187,454	02/16/93	Collins et al.			
	A109	5,303,139	04/12/94	Mark			
	A110	5,440,206	08/08/95	Kurono et al.			
	A111	5,460,689	10/24/95	Raaijmakers et al.			
	A112	5,505,780	04/09/96	Dalvie et al.			
	A113	5,565,247	10/15/96	Suzuki			
	A114	5,576,629	11/19/96	Turner et al.			
	A115	5,630,880	05/20/97	Eastlund			
	A116	5,654,679	08/05/97	Mavretic et al.			
	A117	5,712,592	01/27/98	Stimson et al.			
	A118	5,747,935	05/05/98	Porter et al.			
	A119	5,756,400	05/26/98	Ye et al.			
	A120	5,773,919	06/30/98	Seward			
	A121	5,811,022	09/22/98	Savas et al.			
	A122	5,939,886	08/17/99	Turner et al.			
	A123	5,998,933	12/07/99	Shun'ko			
<b>EXAMINER</b>				<b>DATE CONSIDERED</b>			



<b>FORM PTO - 1449</b>				<b>ATTORNEY DOCKET NO.: ASX-015C4</b>					
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<b>EXAM. INIT.</b>		<b>DOCUMENT NUMBER</b>	<b>DATE</b>	<b>NAME</b>	<b>CLASS</b>	<b>SUB CLASS</b>	<b>FILING DATE IF APPROPRIATE</b>		
	A124	6,007,879	12/28/99	Scholl					
	A125	6,164,241	12/26/00	Chen et al.					
	A126	6,253,704	07/03/01	Savas			9/17/99		
<b>FOREIGN PATENT DOCUMENTS</b>									
<b>EXAM. INIT.</b>		<b>DOCUMENT NUMBER</b>	<b>DATE</b>	<b>COUNTRY CODE</b>	<b>CLASS</b>	<b>SUB CLASS</b>	<b>FILING DATE</b>	<b>ABSTRACT ONLY</b>	<b>ENGLISH LANG (Y/N)</b>
	B6	61-1024	01/07/86	JP			06/12/84	N	Original and translation provided by Advanced Energy Industries, Inc. during litigation with Assignee
<b>OTHER ART, JOURNAL ARTICLES, ETC.</b>									
<b>EXAM. INIT.</b>	<b>OTHER DOCUMENTS: (Including Author, Title, Date, Relevant Pages, Place of Publication)</b>								
	C122	Complaint for Declaratory Judgment of Non-Infringement, filed in the United States District Court for the District of Colorado, by Advanced Energy Industries, Inc., dated April 3, 2003.							
	C123	Complaint, filed in the United States District Court for the District of Delaware, by MKS Instruments, Inc. and Applied Science and Technology, Inc., dated May 14, 2003							
	C124	Answer, filed in the United States District Court for the District of Delaware, by Advanced Energy Industries, Inc., dated December 10, 2003.							
	C125	Amended Complain and Jury Demand, filed in the United States District Court for the District of Colorado, by Advanced Energy Industries, Inc., dated December 15, 2003.							
<b>EXAMINER</b>					<b>DATE CONSIDERED</b>				